

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1-19. (canceled).

20. (previously presented): An apparatus for reading an image and producing electronic data representing the image, the apparatus comprising:

a light source disposed along a path of travel of an image and operable for irradiating the image with visible light and non-visible light;

an optical system disposed along the path of travel for collecting light after it has been irradiated upon the image from the light source,

a line sensor system in optical communication with the optical system, which receives light collected by the optical system and produces electronic data in accordance with the light received, and

first and second filters movably mounted so as to be selectively insertable between the light source and the line sensor system, one of the filters being of the type that substantially transmits only visible light therethrough, and the other filter being of the type that substantially transmits only non-visible light therethrough.

21. (previously presented): An image reading apparatus which reads, by using visible light for image reading and non-visible light for detecting inappropriate pixels, a frame image recorded on an image frame of an original, and, based on a position of an inappropriate pixel which position is obtained by irradiating the non-visible light for detecting inappropriate pixels, corrects the image data of the inappropriate pixel, said image reading apparatus comprising:

an irradiation section for irradiating onto the original the visible light for image reading and the non-visible light for detecting inappropriate pixels;

a line sensor which reads image information in lines along a main scanning direction by light which is one of transmitted through and reflected by the image frame being made incident on said line sensor;

wherein said irradiation section includes:

a light source which simultaneously emits visible light for image reading and non-visible light for detecting inappropriate pixels; and

a filter switching section for selectively inserting one of at least two types of filters between the light source and the line sensor, said at least two types of filters being at least one filter which transmits only visible light and at least one filter which transmits only non-visible light.

22-25. (canceled).

26. (new): An apparatus for reading an image and producing electronic data representing the image, the apparatus comprising:

a carrier for receiving and supporting an image, and conveying the image along a path of travel;

a light source disposed along the path of travel and operable for irradiating the image with visible light and non-visible light;

an optical system disposed along the path of travel for collecting light after it has been irradiated upon the image from the light source, at least a portion of the optical system being movably mounted for movement back and forth along the path of travel;

a line sensor system in optical communication with the optical system, which receives light collected by the optical system and produces electronic data in accordance with the light received; and

first and second filters movably mounted so as to be selectively insertable between the light source and the line sensor system, one of the filters being of the type that substantially transmits only visible light therethrough, and the other filter being of the type that substantially transmits only non-visible light therethrough.

27. (new): An image reading apparatus which reads, by using visible light for image reading and non-visible light for detecting inappropriate pixels, a frame image recorded on an image frame of an original, and, based on a position of an inappropriate pixel which position is

obtained by irradiating the non-visible light for detecting inappropriate pixels, corrects the image data of the inappropriate pixel, said image reading apparatus comprising:

an irradiation section for irradiating onto the original the visible light for image reading and the non-visible light for detecting inappropriate pixels;

a line sensor which reads image information in lines along a main scanning direction by light which is one of transmitted through and reflected by the image frame being made incident on said line sensor; and

a sub-scanning section for, while the original is stationary, moving, in a sub-scanning direction, a reading position of the image frame to be read by said line sensor,

wherein said sub-scanning section moves at least said line sensor in the sub-scanning direction,

a mirror which deflects the light which is one of transmitted through and reflected by the image frame so that the light is made incident on said line sensor, wherein said sub-scanning section moves said mirror in the sub-scanning direction,

wherein said sub-scanning section includes an optical path length adjusting section for maintaining an optical path length constant even when the positional relationship between said mirror and said line sensor is changed due to the movement of said mirror.

28. (new): An image reading apparatus which reads, by using visible light for image reading and non-visible light for detecting inappropriate pixels, a frame image recorded on an

image frame of an original, and, based on a position of an inappropriate pixel which position is obtained by irradiating the non-visible light for detecting inappropriate pixels, corrects the image data of the inappropriate pixel, said image reading apparatus comprising:

an irradiation section for irradiating onto the original the visible light for image reading and the non-visible light for detecting inappropriate pixels;

a line sensor which reads image information in lines along a main scanning direction by light which is one of transmitted through and reflected by the image frame being made incident on said line sensor; and

a sub-scanning section for, while the original is stationary, moving, in a sub-scanning direction, a reading position of the image frame to be read by said line sensor,

wherein said sub-scanning section moves at least said line sensor in the sub-scanning direction,

wherein said irradiation section includes:

a light source which simultaneously emits visible light for image reading and non-visible light for detecting inappropriate pixels; and

a filter switching section for selectively inserting one of at least two types of filters between the light source and the line sensor, said at least two types of filters being at least one filter which transmits only visible light and at least one filter which transmits only non-visible light.

29. (new): An apparatus for reading an image and producing electronic data representing the image, the apparatus comprising:

a carrier for receiving and supporting an image, and conveying the image along a path of travel;

a light source disposed along the path of travel and operable for irradiating the image with visible light and non-visible light;

an optical system disposed along the path of travel for collecting light after it has been irradiated upon the image from the light source, at least a portion of the optical system being movably mounted for movement back and forth along the path of travel; and

a line sensor system in optical communication with the optical system, which receives light collected by the optical system and produces electronic data in accordance with the light received,

wherein in a first direction, the light source irradiates the image with visible light and in a second direction opposite the first direction, the light source irradiates the image with non-visible light.

30. (new): An apparatus for reading an image and producing electronic data representing the image, the apparatus comprising:

a carrier for receiving and supporting an image, and conveying the image along a path of travel;

a light source disposed along the path of travel and operable for irradiating the image with visible light and non-visible light;

an optical system disposed along the path of travel for collecting light after it has been irradiated upon the image from the light source, at least a portion of the optical system being movably mounted for movement back and forth along the path of travel;

a line sensor system in optical communication with the optical system, which receives light collected by the optical system and produces electronic data in accordance with the light received; and

a diffuser disposed between the carrier and the light source.

31. (new): An apparatus according to claim 30, wherein the diffuser is movable with the light source.